

# I.T. Services

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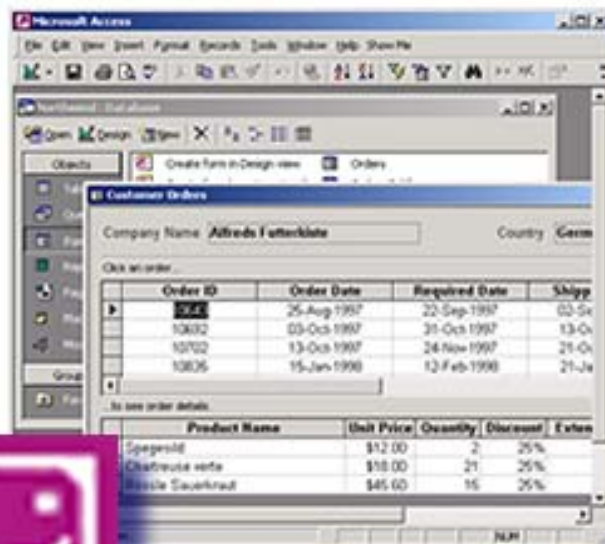
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*MS Office XP Manuals for our SAISD Community*

*Your Guide to:*

## Microsoft Access XP

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## *Your Guide to Microsoft Access XP v. 1*

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Your assistance will be greatly appreciated.



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## *What is Access XP?*

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Access is the database application in Microsoft Office. A database is a program that organizes, sorts, queries and reports large amounts of related data in an efficient, automated manner. To conceptualize what a database is, imagine a filing cabinet filled with many folders. The filing cabinet is analogous to the database and each folder contains one record. A record is a storage place for all data about a single item. As we develop a database of famous Texans, “Famous Texans” is the database, and “James Bowie, David Crockett, etc” would be the individual records. Within each record are several individual pieces of information called fields. In our example, within the records of each famous Texan, we might find fields for date of birth, first name, last name, place of birth, occupation, reason for fame, notes, etc.

## What should you consider before beginning?

### Plan Ahead!

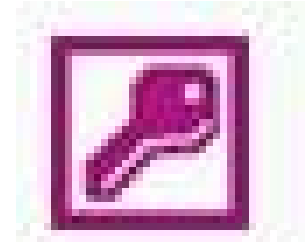
The key to using databases successfully is planning. It is critical to do a thorough job of pre-planning before creating a database. While the database can be modified or “fixed” at a later time, it is much easier to create the database structure in the beginning. If fields need to be added at a later time, there will be a large amount of data that will need to be input retroactively. Sketch out on paper the data you need to track. Have discussions with other people who will be using the database. Consider every possible piece of information that you are likely to want to input. Then, break down each instance of information into its smallest component parts. For example, if we have records for famous Texans and we might want fields for first name and last name, rather than just one name field. This will make it easier to sort the data at a later time.



**Stop** now and plan your database. Avoid the impulse to jump in and create a database without first spending a good amount of time planning. This cannot be stressed enough.

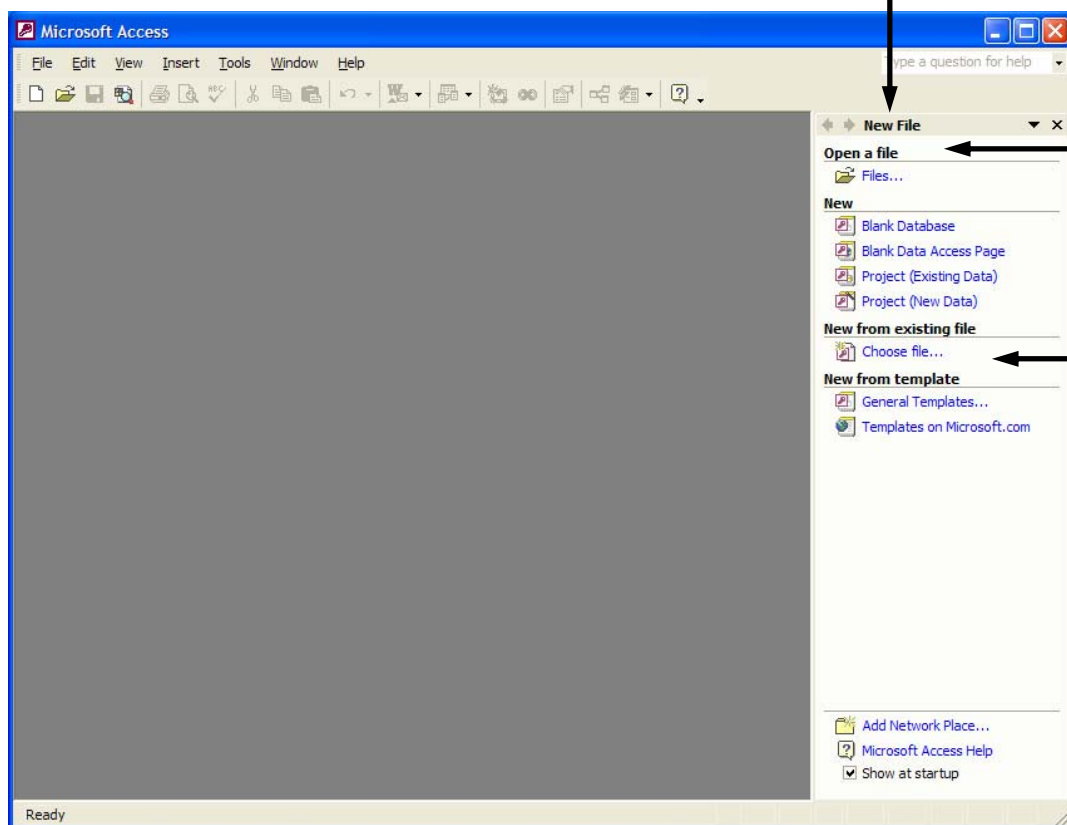
## Opening a new database

- Start the Access program by clicking on the “key” icon. This icon may be found in the Microsoft Office Shortcut Bar, a desktop shortcut, or from the Start Button/Programs/ Microsoft Access location.



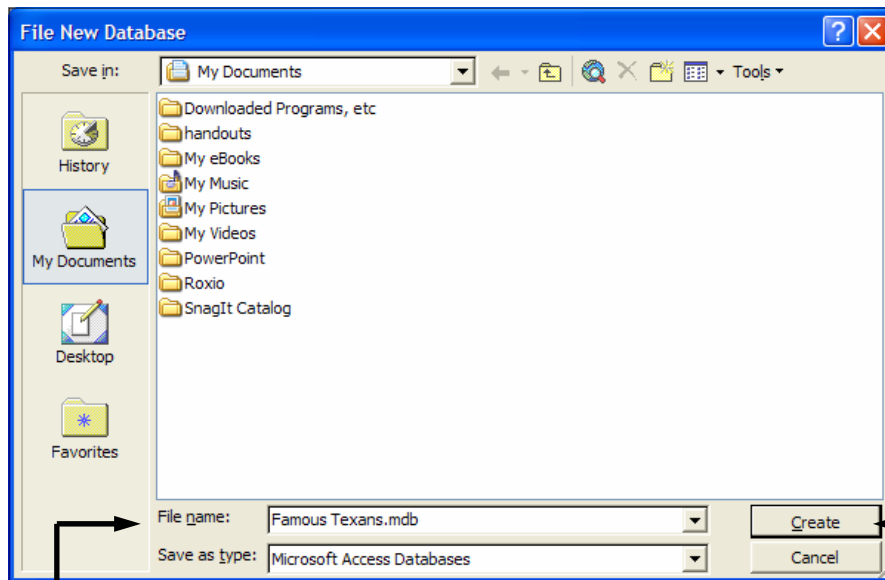
MS Access

- The following window will open. Make note of the **Task Pane** on the right side of the window.



- After you have created databases, you will see them listed under “Open a File” or you can navigate to your database by clicking on “Choose file” from “New from existing file” on the Task Pane.

- When you click on New/Blank database, the following window will open, allowing you to create your database. Name your database with an appropriate title, “Famous Texans”.

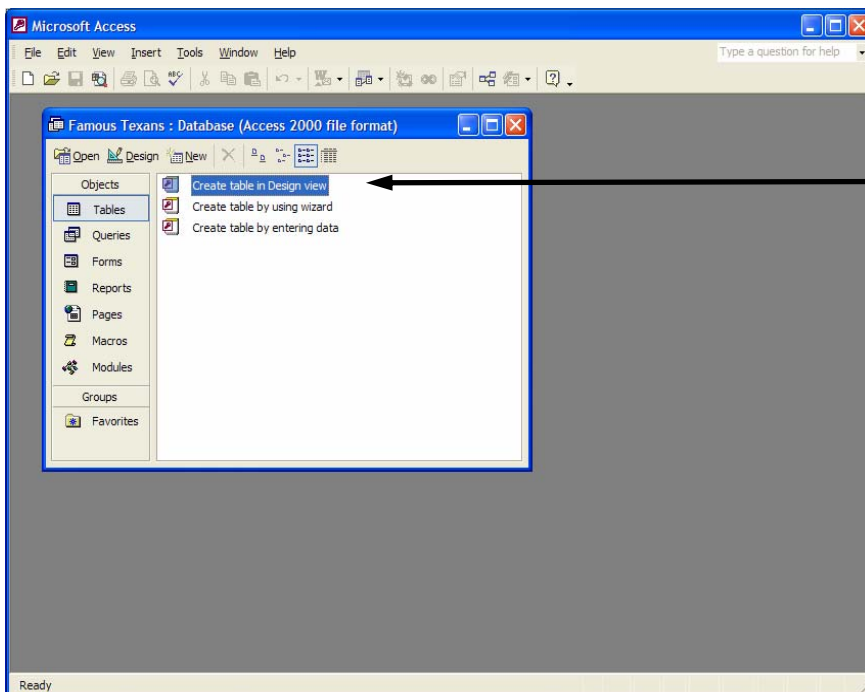


[1] Click in the Filename field

[3] Click on the Create button

[2] Type in the file name “Famous Texas.mdb”

- A new database will be created and will open for you to begin work

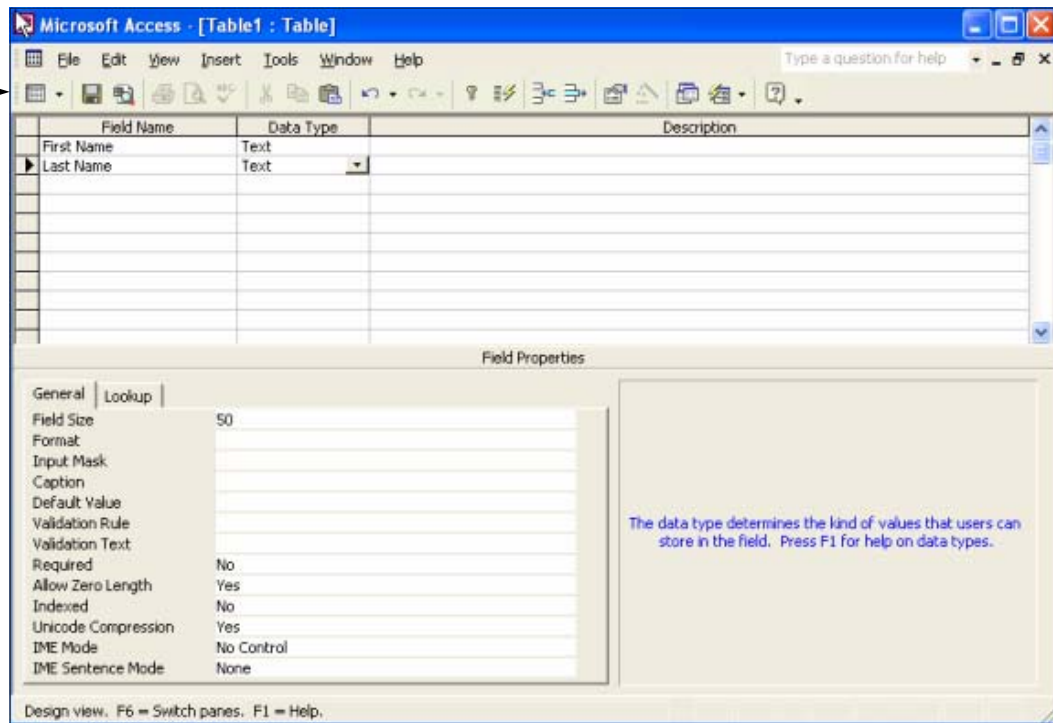


[1] Click on Create a table in Design view

# Tables

## Creating a table

- The first step to creating a database is to set up the tables involved. The table is the storehouse for all your data, and if it is set up properly, with forethought, it will make your database experience much more pleasant.
- The recommended method of creating tables is to use the **Design View** (see previous page).
- When you select Design View, the following window opens:



[1] Located the View icons

[2] To return to the Datasheet or Table view, click the down arrow next to the selected view icon



## What is a field name?

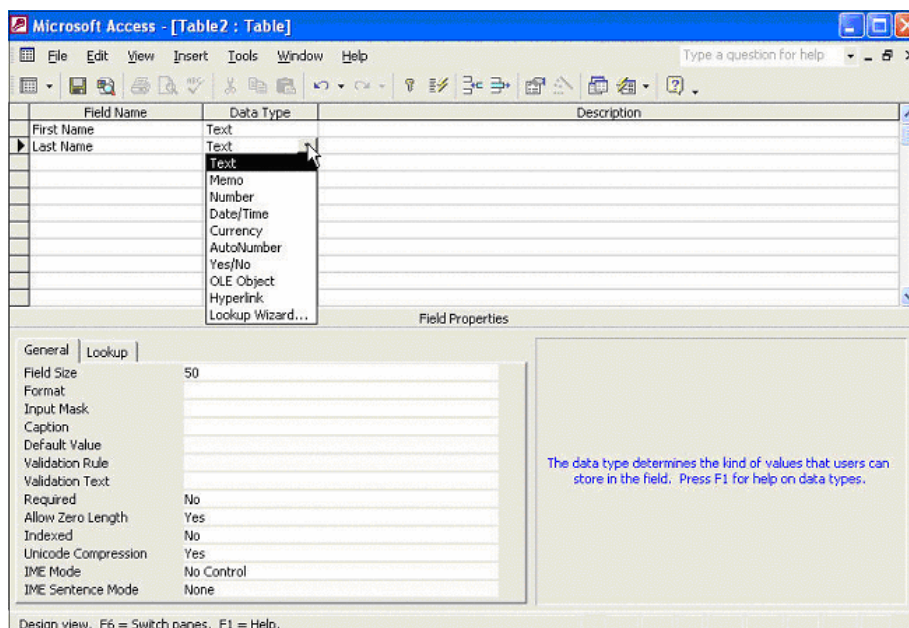
- The “field name” is a semi-descriptive label for the information you will be entering into the record. For example, if you are storing information about a person, you might want two fields named “First Name” and “Last Name”. These labels will show up in the form you use later on, so that “fname” or “lname” labels are not desirable.



**REMEMBER:** Break your fields down into the most basic elements (as appropriate). In this case, first and last names are a better format than merely “name”.

## What is a data type?

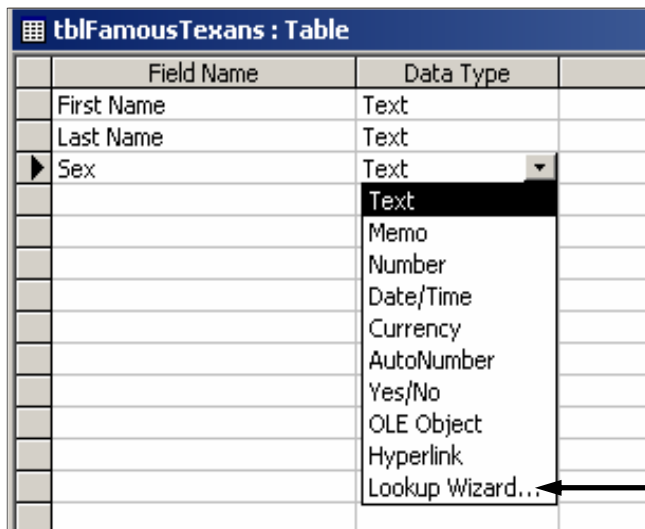
- The “data type” column lets you specify whether your field will contain text, numbers,



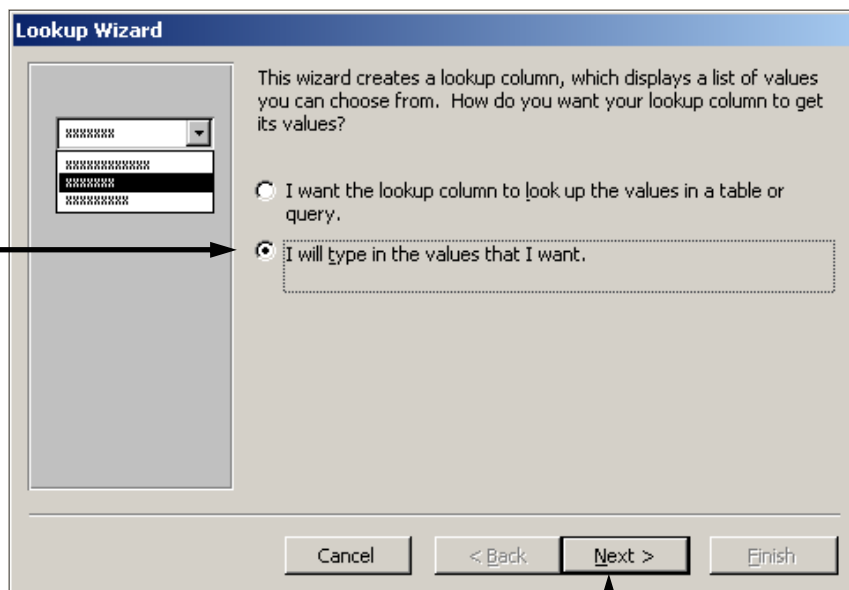
- In the picture above, the “Description column” allows you to enter any notes you might have about the field. For example, you might want to put “No Nick-names” as a descriptor of the first name field to remind you not to use nick-names.
- As you can see, 50 characters is the default field size. “First Name” field size might logically be reduced to 15 and the “Last Name” to 25. If you leave the field size at 50, your database will become large, as all space assigned takes up room whether it is used or not.

## Creating a lookup field

- A look up field allows you to choose data to enter, rather than having to type it in manually each time. To create a lookup field, use the design view and in the field type, use the drop down menu to select **Lookup Wizard**



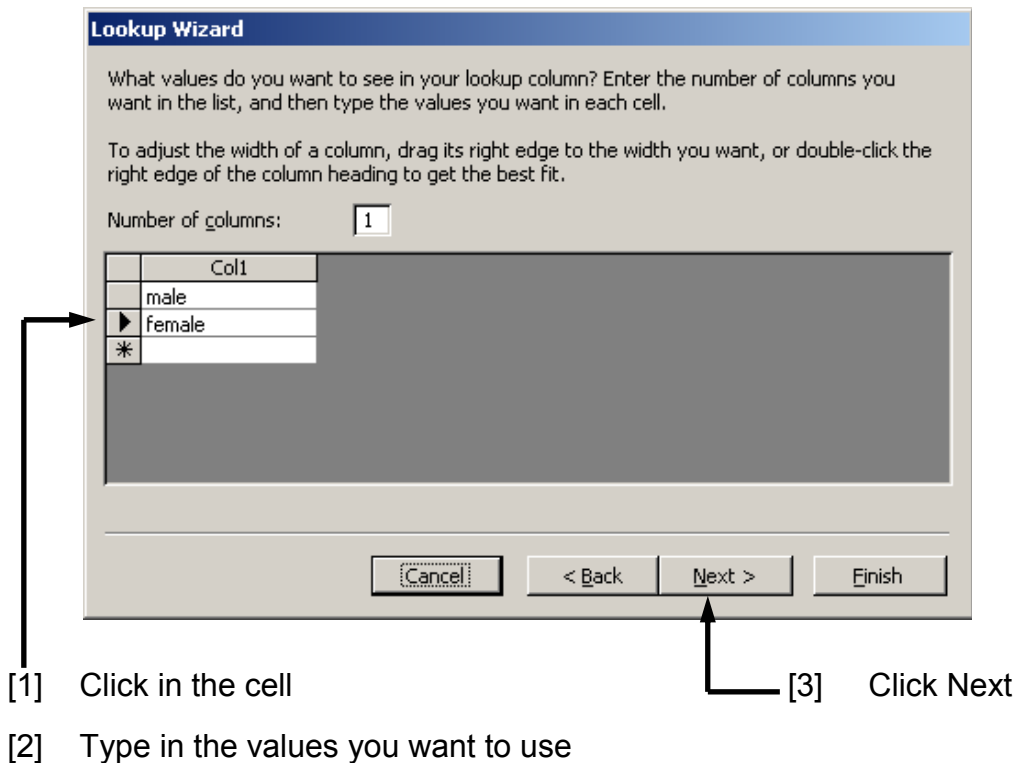
- You will be asked how you want to enter the choices:



[1] Choose to type in your values

[2] Click Next

- In this case, we are creating a field to input gender.



- The next window will allow you to choose the label that will show up on your form later.



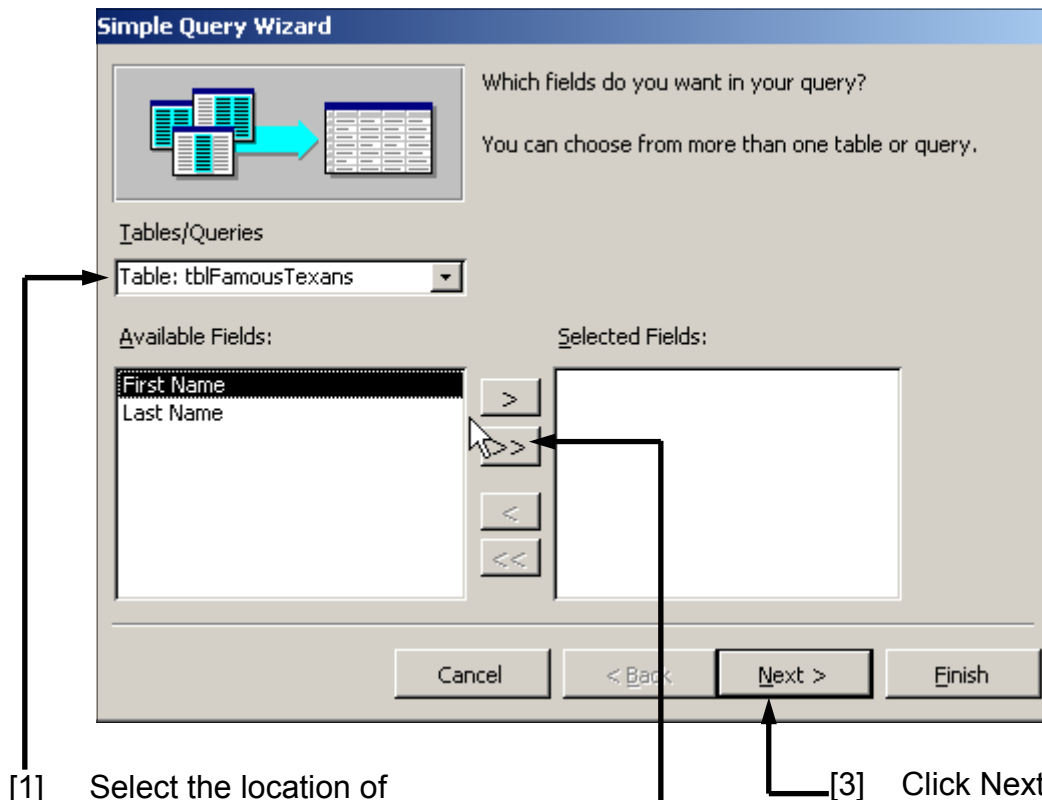
- The values that you can choose from are listed on the Lookup tab at the bottom of the design view page.
- If you wish to add other values, you simply type in a semicolon (;) and then enter the new value enclosed in quotes. Do not use spaces.

[illegible]

# Query

## Creating a query

- A query is like a “permanent” filter. It allows you to quickly sort and limit data for use in forms or reports. It is easiest to create queries using the Simple Query Wizard. When you run the simple query wizard, you will be asked where you want to get your data from. Generally you will want to select your main data table as the location to query.



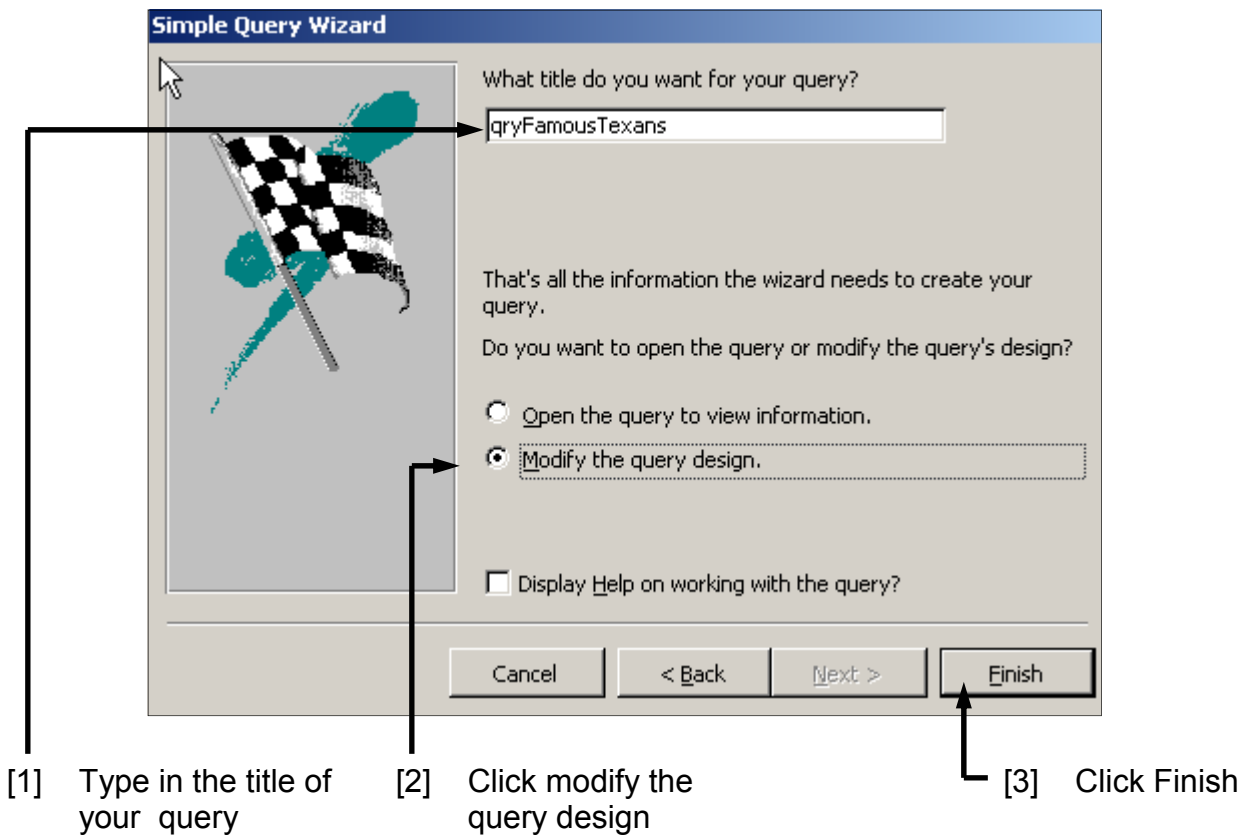
[1] Select the location of your query (by table)

[2] Select the fields you want to view and use the > or >> signs to move them to the Selected Fields area.

[3] Click Next

- > Adds the selected field only
- >> Adds all fields
- < Removes the selected field only
- << Removes all fields

- Name your query according to the **Leszynski Naming Convention** (i.e. qry=queryName). Once the query is created, it can be modified using the design view.



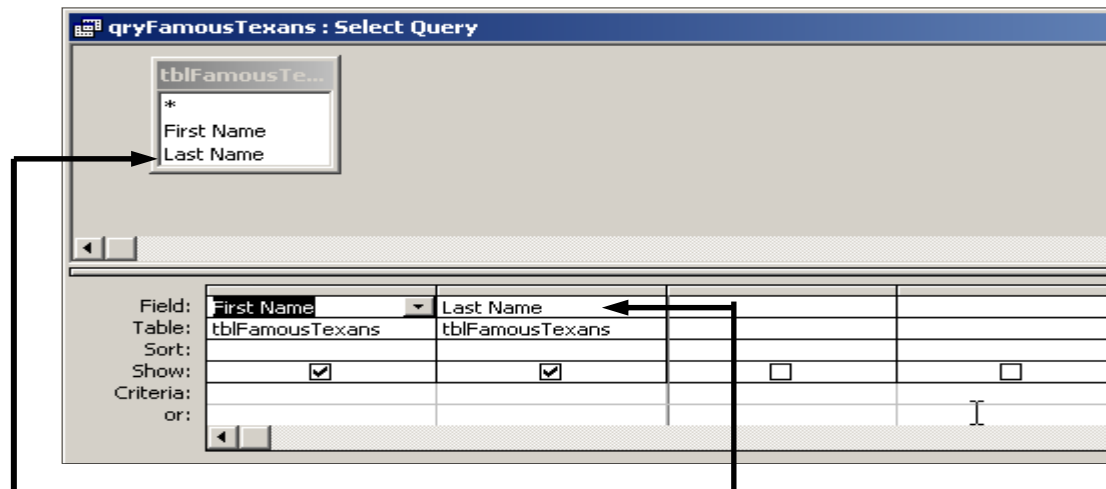
## What's the LNC naming convention?

- LNC (Leszynski Naming Convention)
- It is good form and a helpful organizational tool to use the LNC. That way, as you manipulate your database objects (tables, forms, queries, and reports) you will have a better idea of how to proceed. For example, if you have both a table and a query with the same name, you may become confused and query a query when you meant to query a table.

Tables	tbl	tblMyTable
Queries	qry	qryMyQuery
Forms	frm	frmMyForm
Reports	rpt	rptMyReport

## How to modify a query

- To modify a query in design view:

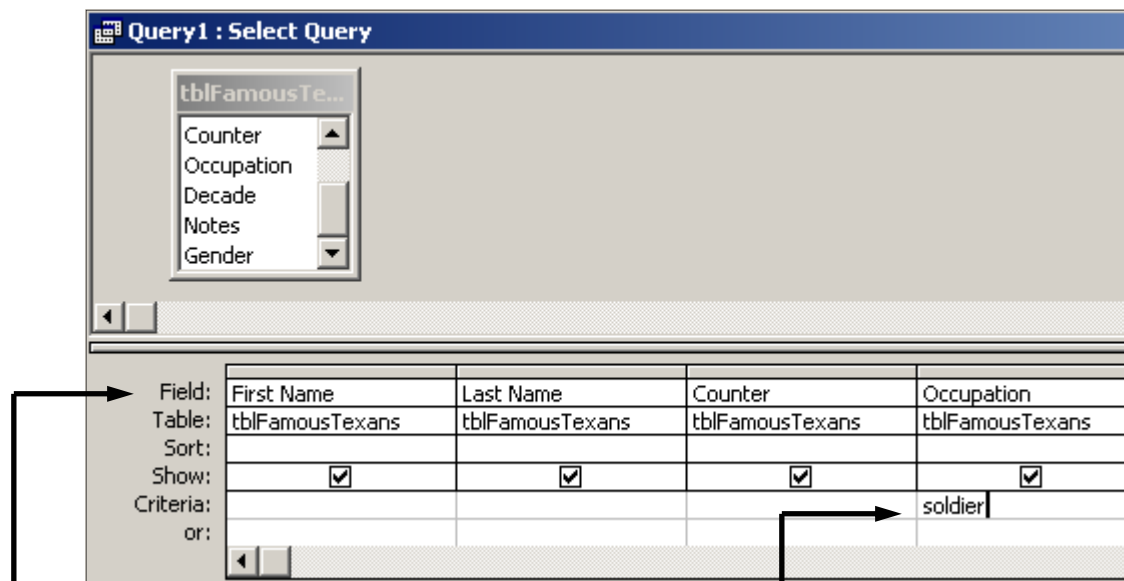


[1] Click on the fieldnames in the Table window

[2] Drag the fieldnames into the Query area

- In the row called labeled “Criteria”, enter the information you are looking for.

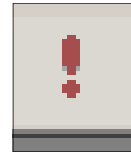
In the following example we will look for all the soldiers who are in the Famous Texan database:



[1] Find the column related to the information (by Field)

[2] In its Criteria row, type the word that you are looking for.

- Find the Run icon located on the Query Design toolbar (usually located at top)



- Clicking on the **Run** icon will display the results of your query:

Query1 : Select Query				
	First Name	Last Name	Counter	Occupation
▶	James	Bowie	1	soldier
	Davy	Crockett	1	soldier
	Deaf	Smith	1	soldier
	Audie	Murphey	1	soldier
*			1	



## Querying a date

- The trick to using > or < to query for dates before and after a certain date relies on formatting the date field when you originally set up the first table.
- The Data Type should be equal to Date/Time

[illegible]

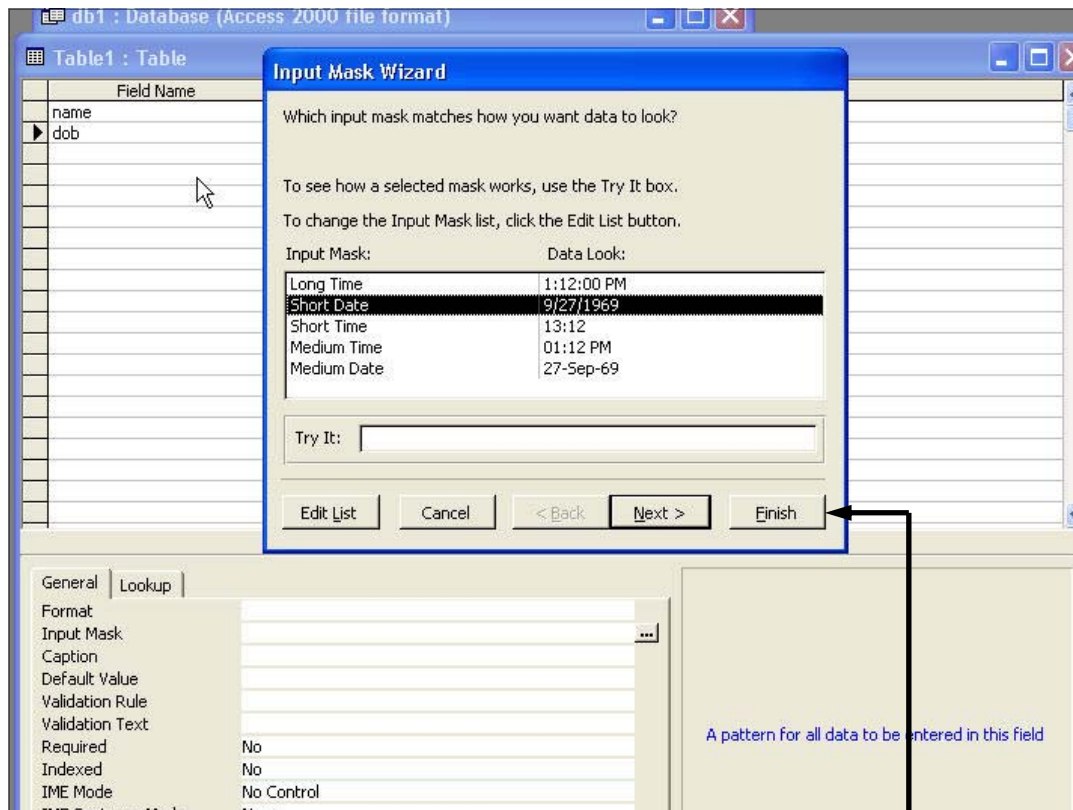
[1] Check the format of the date by looking at the Input Mask.

The example of the input mask above indicates that dates should be entered in a particular format, such as “10/02/2004”

[2] To change the format, you may click on the Input Mask Wizard button.

The following wizard helps you pick another date format.  
(See diagram on the following page)

- You choose, say DOB, as a DATE FIELD, but you must also set the INPUT MASK, so that all dates are in the same format
- The date **MUST** be formatted before Access will accept it. Once you pick the format, then you can use the > or < to query.



[1] Choose Short Date as an example.

The date, in this case, must be entered in the format of 01/13/1956.

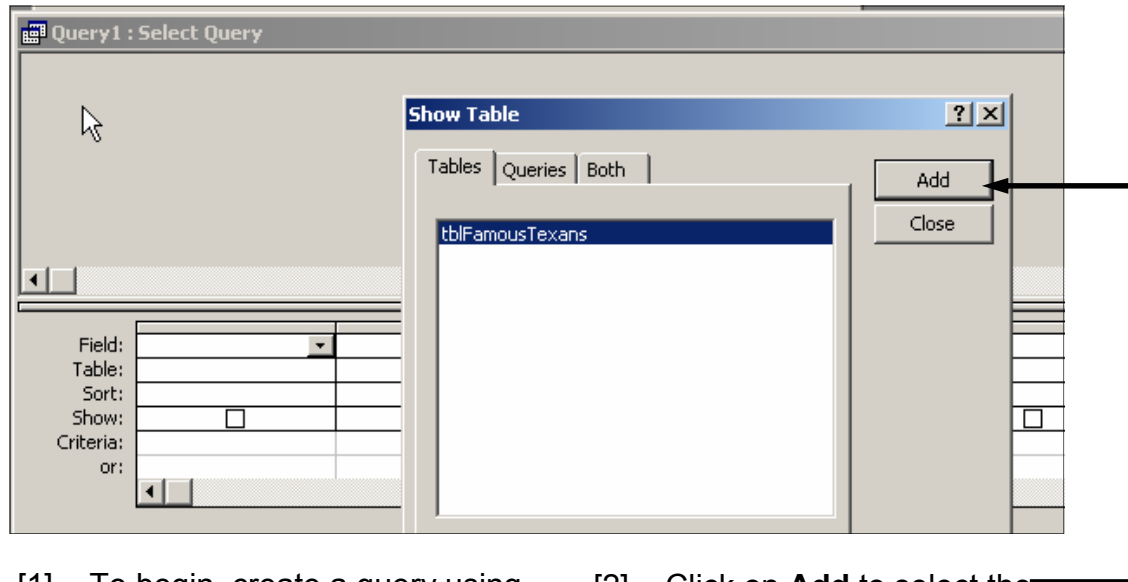
[2] Click Finish

[3] Now use the Query in **Design View** (the blue triangle, upper left on menu)

[4] Enter criteria with < or >. Your query will now work.

## Creating a parameter query

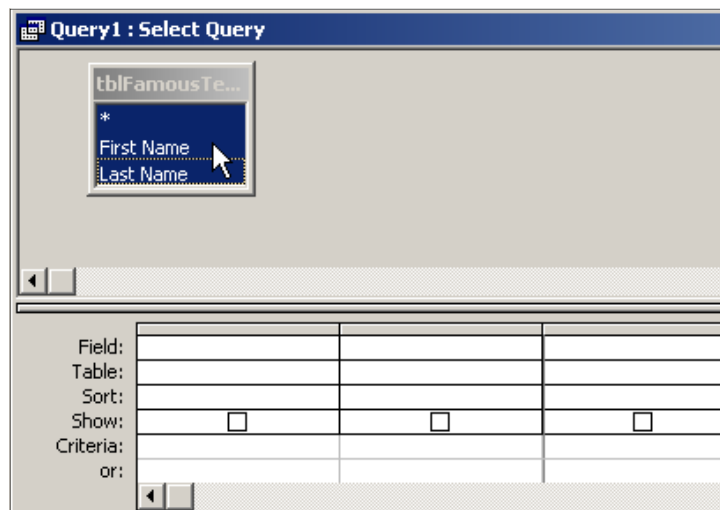
- A parameter query is an active searching query that can look up field information that you specify.



[1] To begin, create a query using the **Design View**, not the wizard. A window similar to the one above will open.

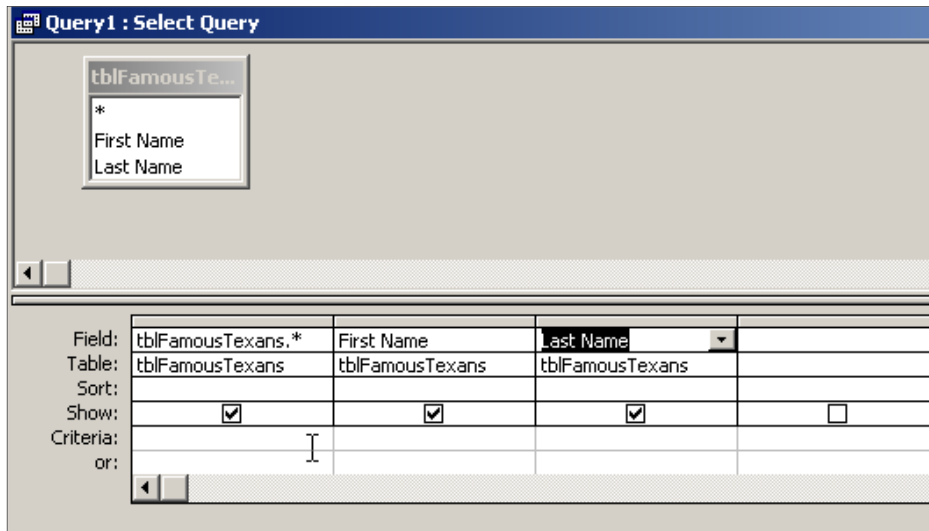
[2] Click on **Add** to select the table on which to perform the query.

- The following table will appear.



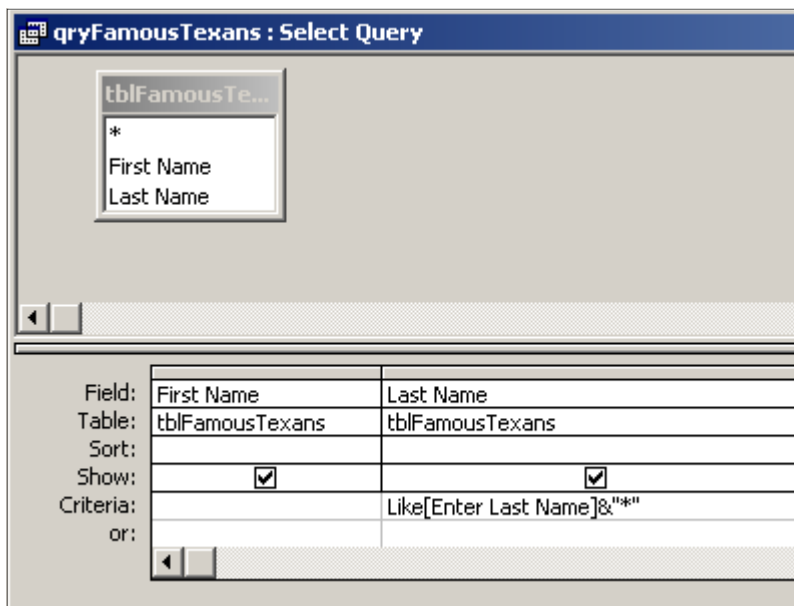
[1] Select all fields by holding the SHIFT key while you click on all fields.

- Modify your query in design view.



[1] Drag the fields and drop them in the grid.

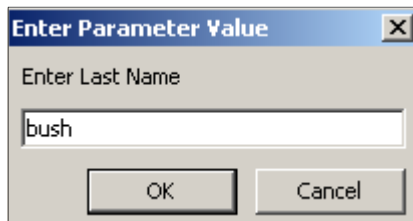
- The window below shows how to perform a parameter query that will list all the famous Texans named “Bush”



[1] Enter the following syntax in the criteria in design view:

Like[your text]&"\*"

- This tells Access to open a dialog box that says “Enter Last Name” and when you type in “Bush”, the results are given.



- [1] Dialog box that allows you to enter your query's parameter.

First Name	Last Name
George	Bush
Barbara	Bush
Laura	Bush
*	

- [2] Results table that shows the data found by using the query's parameters.

## Counting using a query

- Counting while using a query will help you keep track of the number of occurrences of the same data entry within table.

tblFamousTexans : Table				
	First Name	Last Name	Counter	Gender
	James	Bowie	1	male
	Davy	Crockett	1	male
	George	Bush	1	male
▶	Barbara	Bush	1	female
	Deaf	Smith	1	male
	Laura	Bush	1	female
	Audie	Murphey	1	male
	Emma	Tennayucca	1	female
	Barbara	Jordan	1	female
*			1	

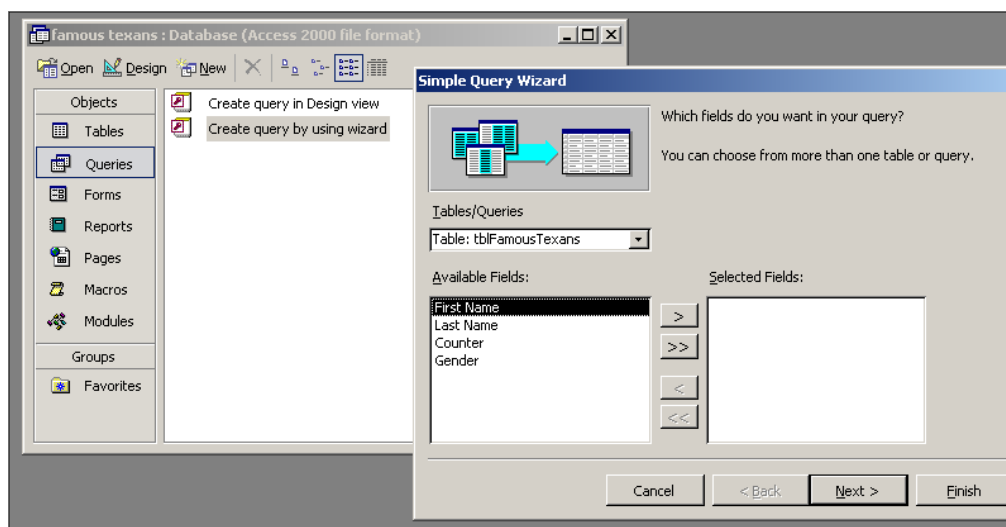
[1] Create a field in your table that defaults to "1".

[2] Then rename the column to "Counter".

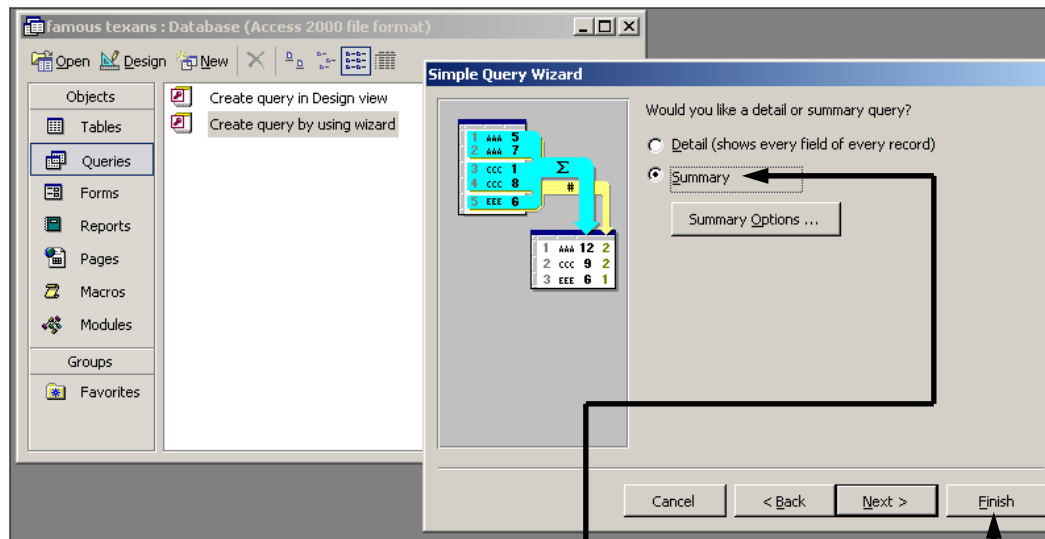
This is used to calculate.

To do this, right click on a column heading and chose "Insert Column" from the drop down menu.

- Create a query based on the Table using NEW, SIMPLE QUERY WIZARD



- Use the Create query by using the wizard to create your simple query.



[1] Choose Summary.

[2] Click Finish



- Check both the **number field** and the **Count Records in Table**
- Results in Query should show SUM of Counter and Count of Table 1.

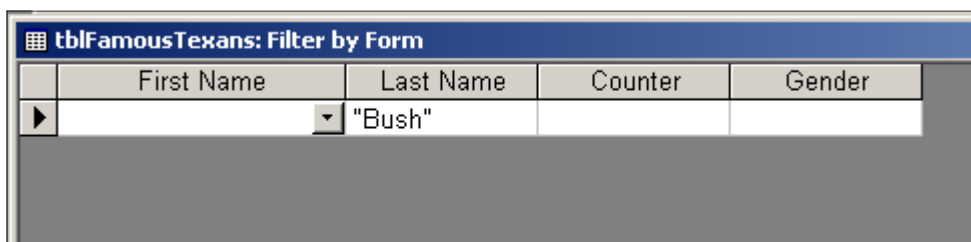
	First Name	Last Name	Gender	Sum Of Counter	Count Of tblFam
	Audie	Murphey	male	1	1
	Barbara	Bush	female	1	1
	Barbara	Jordan	female	1	1
	Davy	Crockett	male	1	1
	Deaf	Smith	male	1	1
	Emma	Tennayucca	female	1	1
	George	Bush	male	1	1
	James	Bowie	male	1	1
▶	Laura	Bush	female	1	1

Record: 9 of 9

## Using filters

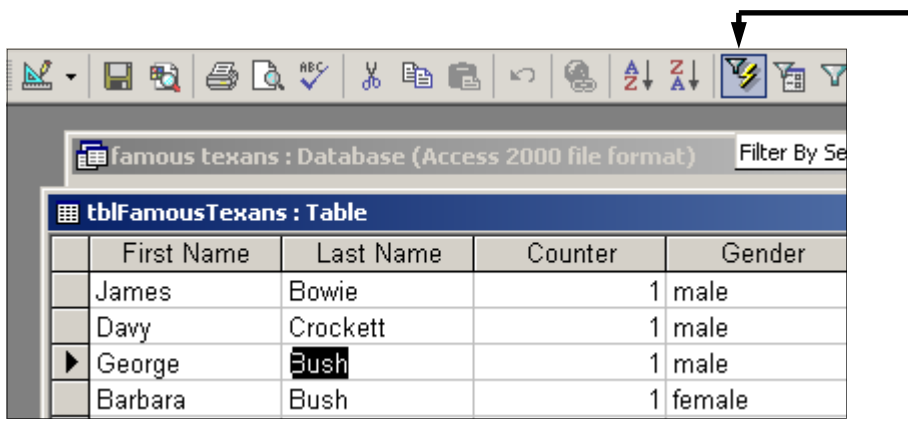
- A filter is like a non-permanent query. It exists for the time that you have the database open and is deleted when you close the database.

- Filters may be either **by form**  or **by selection** 
- Filtering by form allows you to type in the data you are searching for.



[1] This filter will show all last name Bush.

- Filtering by selection allows you to highlight the data you want and find all instances of it.



[1] Highlight the data

[2] Click on the Filter by Selection icon.



- To remove a filter, simply click the funnel  Icon

Remember that filters will be lost as soon as you close the database.

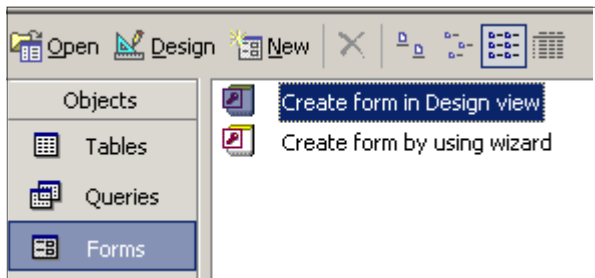
Also, remember that if a lot of your data seems to be missing, you have probably applied a filter.

Click on the funnel icon and hopefully all your data will return. If it doesn't, let us hope you have made a copy of your database.

## Forms

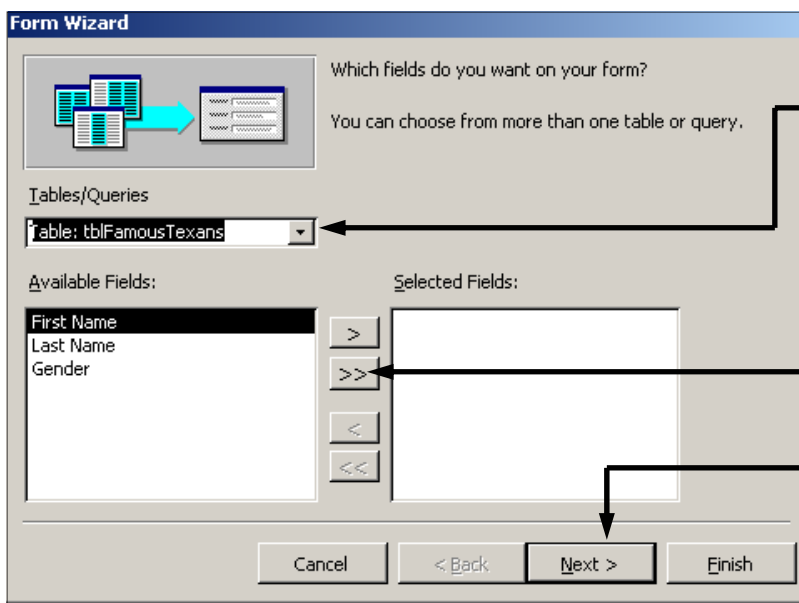
### Creating a form

- Forms are the “windows to your data”. You generally enter and delete data in a form rather than in the table itself. The design of the table allows you to see as much or as little of the data that is stored in your tables as you would like.
- For example, you might need to see that Davy Crockett was a famous Texan, but you might not care what record number was assigned to him. You can make individual forms to show you specific information without losing any of the data you do not wish to view.



[1] Click the Create form by using wizard option .

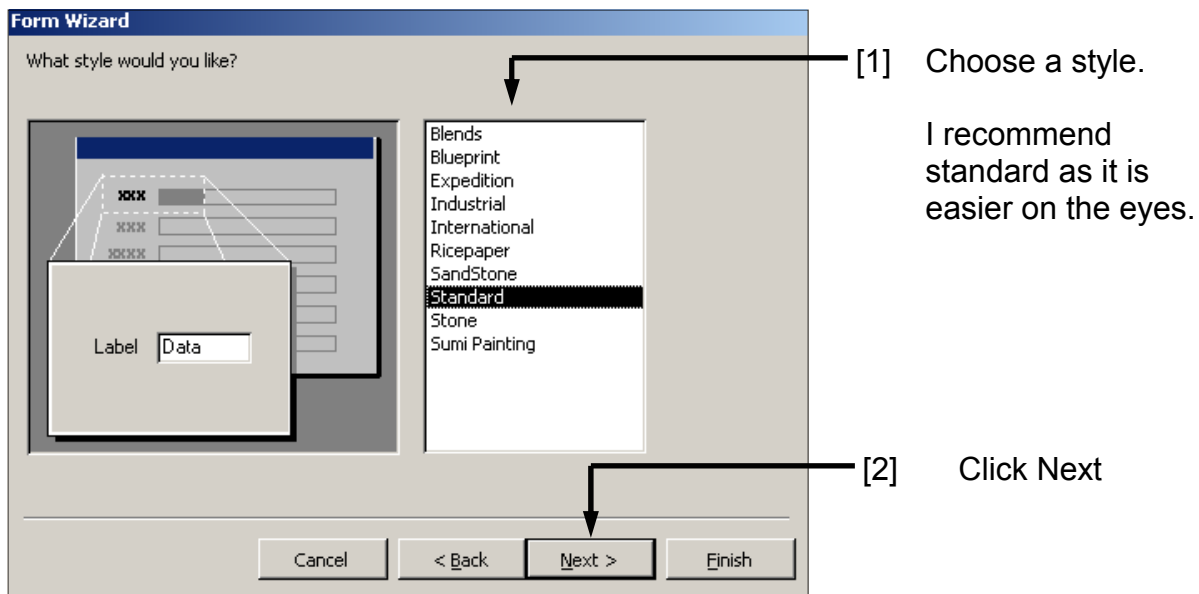
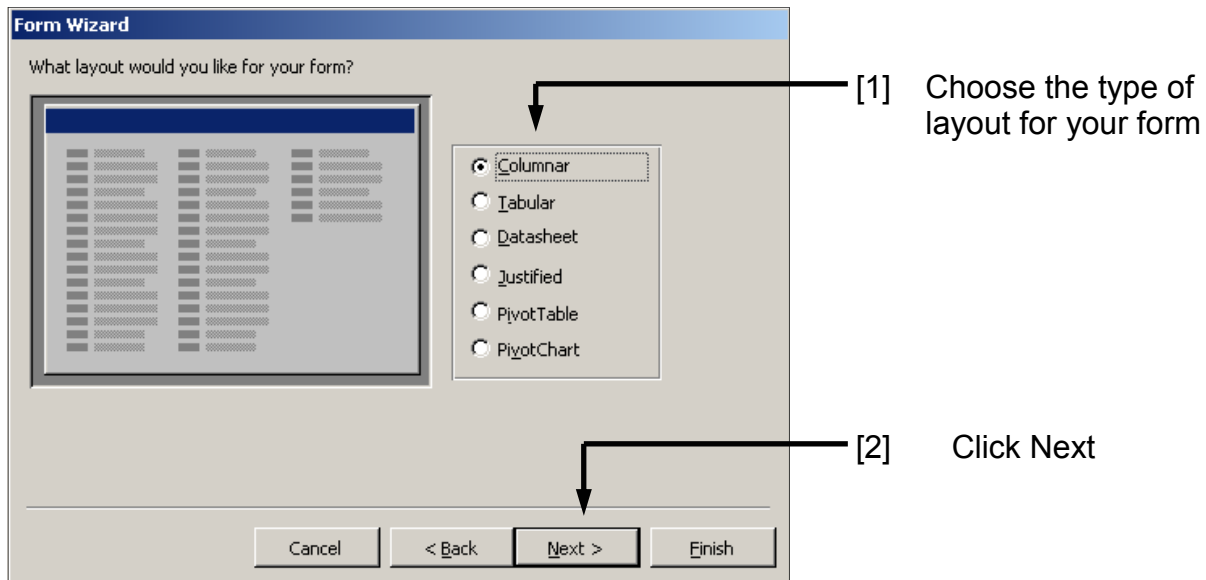
- When you click on the wizard choice, the following dialog opens:



[1] Make sure you are getting fields from the proper source. Initially this will probably be a table.

[2] Select the fields you want to show in your form.

[3] Click Next



**Form Wizard**

What title do you want for your form?

frmFamousTexans

That's all the information the wizard needs to create your form.

Do you want to open the form or modify the form's design?

☐ Open the form to view or enter information.

☒ Modify the form's design.

☐ Display Help on working with the form?

Cancel < Back Next > Finish

[1] Name your form (notice the LNC!)

[2] Check the button of Modify the form's design.

[3] Click Finish

- A “generic” form is built.

**Form1 : Form**

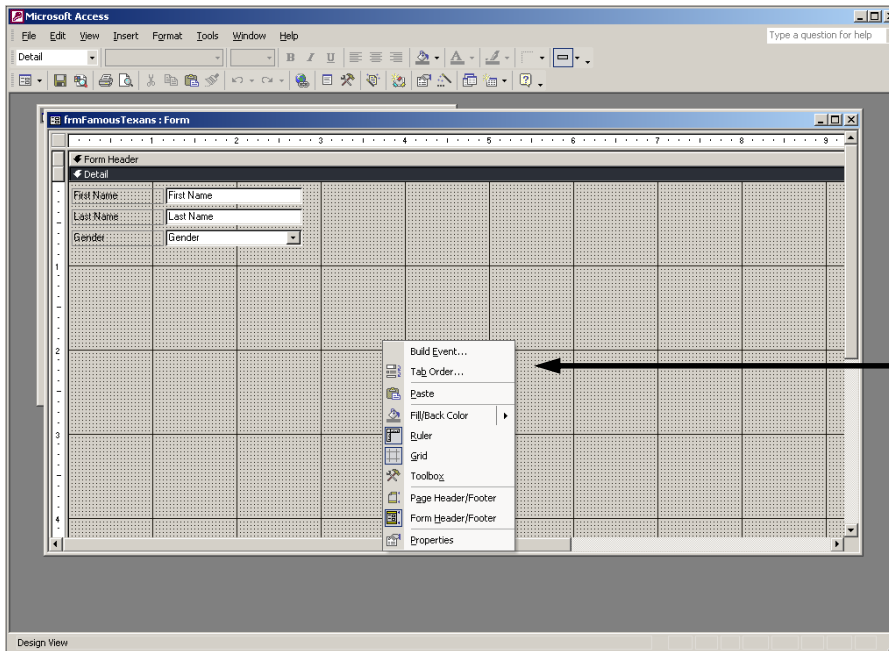
Form Header

Detail

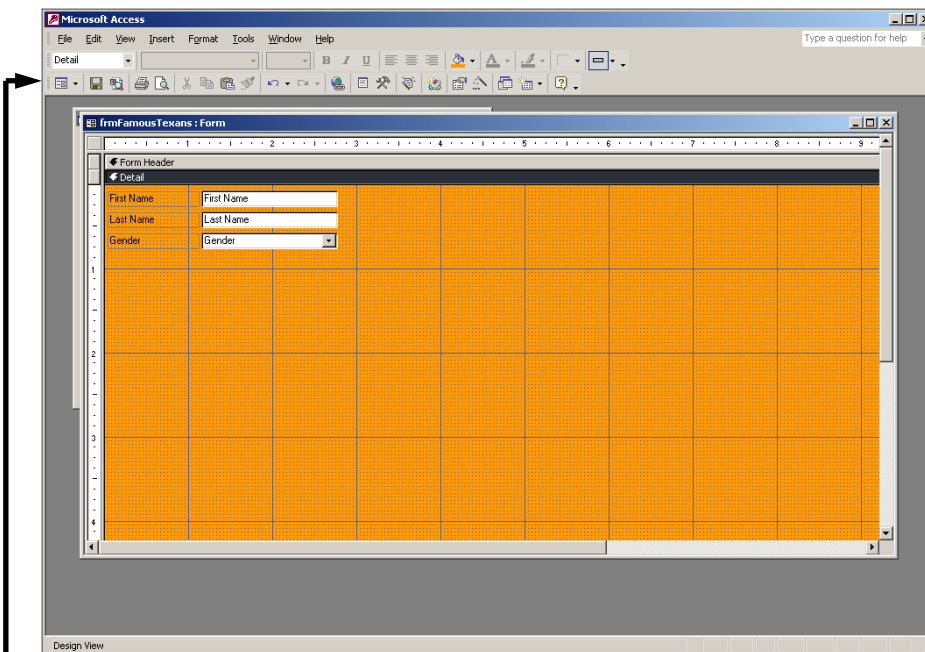
First Name	First Name
Last Name	Last Name
Gender	Gender

Form Footer

[1] Stretch the footer down and the right border to the right.



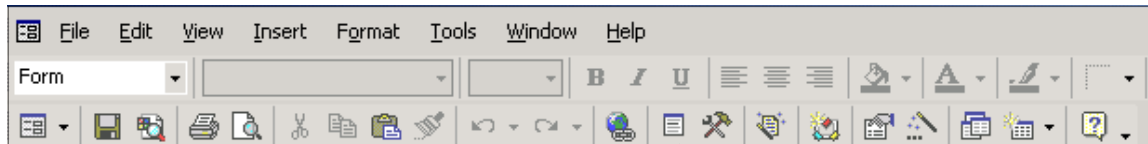
[1] Right click in the form area to get drag down menu that allows you to add color to your form.



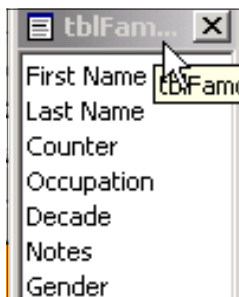
[1] Click on the View button to see your form. You may click back to design to change your form.

## Modifying a form

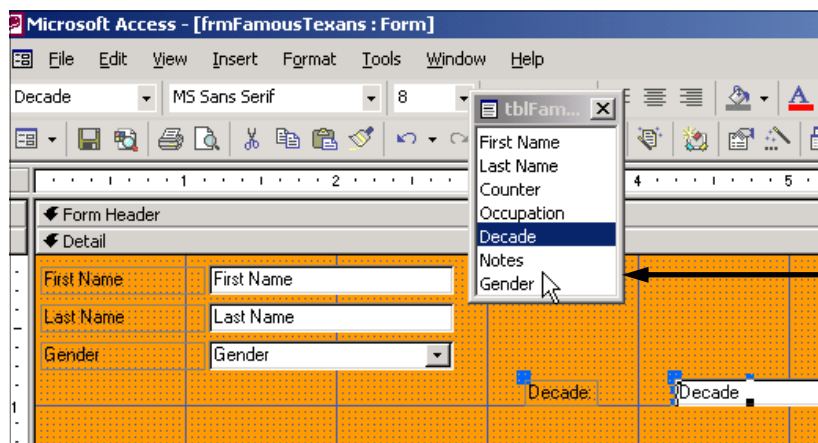
- To modify a form, open the form and switch to Design View



- [1] On the Formatting toolbar, click the Field list icon.



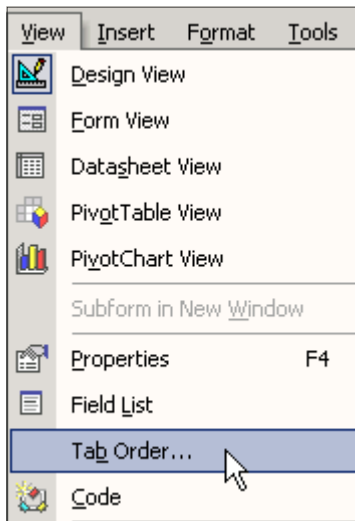
- [1] A list of available fields will appear.



- [1] Drag the field that you want to add onto the form itself.

[1] Then, arrange the fields to your liking by dragging the selected field.

- This is how you can change the tab order of the fields (when you hit the tab key, you move from field to field).



[1] On the View menu, click Tab Order.

**Tab Order**

Section

☐ Form Header

☒ Detail

☐ Form Footer

Click to select a row, or click and drag to select multiple rows. Drag selected row(s) to move them to desired tab order.

Custom Order:

- First Name
- Last Name
- Gender
- Decade

OK Cancel Auto Order

[1] Under Section, click the section you want to change.

[2] Do one of the following:

If you want to create your own custom tab order, click the selector for the control you want to move. (Click and drag to select more than one control at a time.) Click the selector again and drag the control to the desired location in the list.

[3] Or:

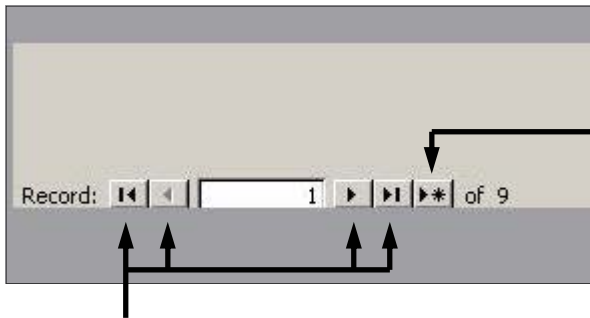
If you want Microsoft Access to create a left-to-right and top-to-bottom tab order, click Auto Order. Auto order tabs left-to-right and then top-to-bottom

[4] Click OK



## How to navigate through your database

- Use the Navigation/New Record bar at the bottom of the database window:



[1] Click to navigate forward or backward through your records.

[2] Click to navigate forward or backward through your records.

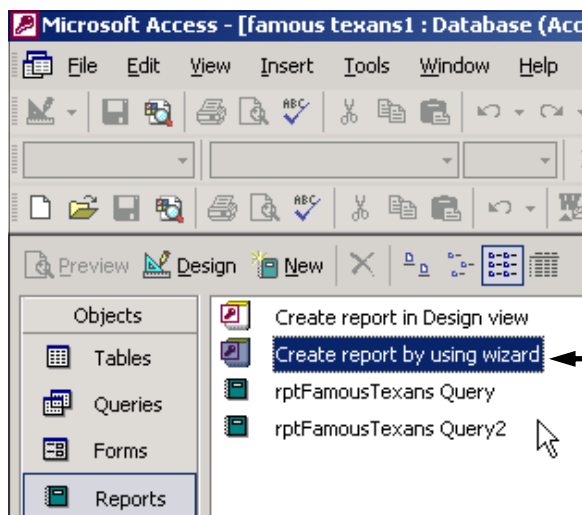
- To delete a record, go to Edit, Delete Record, or click on the Delete Record icon on the toolbar.



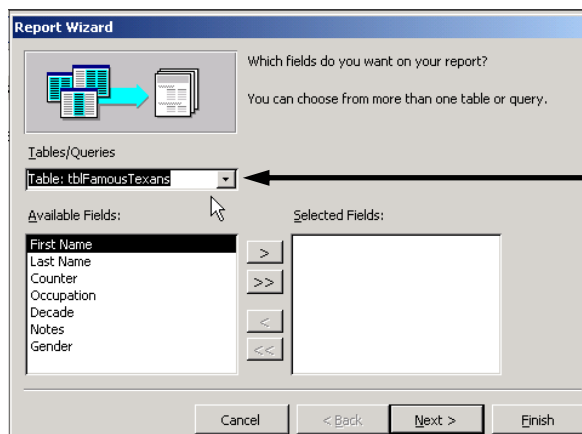
## Reports

### Creating a report

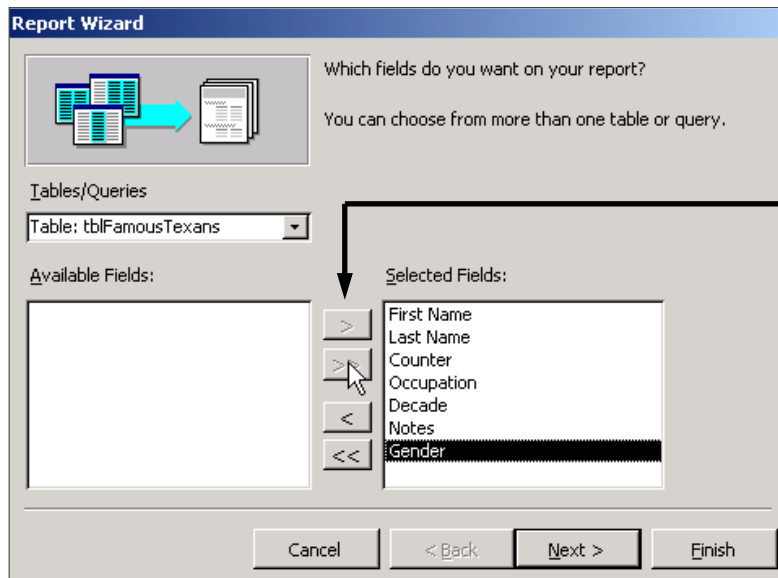
- Reports are the hardcopy of your database.... the printouts. You may have many reports in one database. Some will be based on table data; others may be based on specific queries.
- As the data changes (added or deleted) or the query changes, the report is updated automatically.



[1] Start your report by clicking on the Create report by using wizard

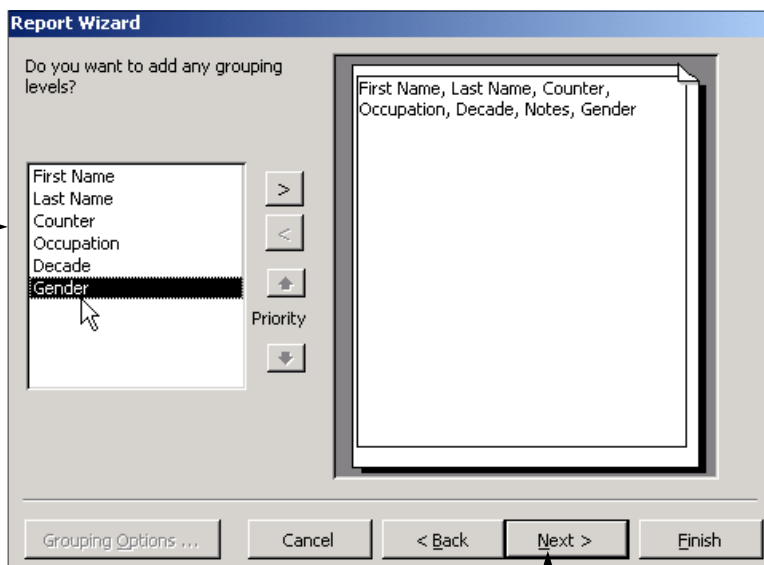


[1] Choose the table or query that you want your data from.



[1] Add the fields you want to print.  
Include the Counter.

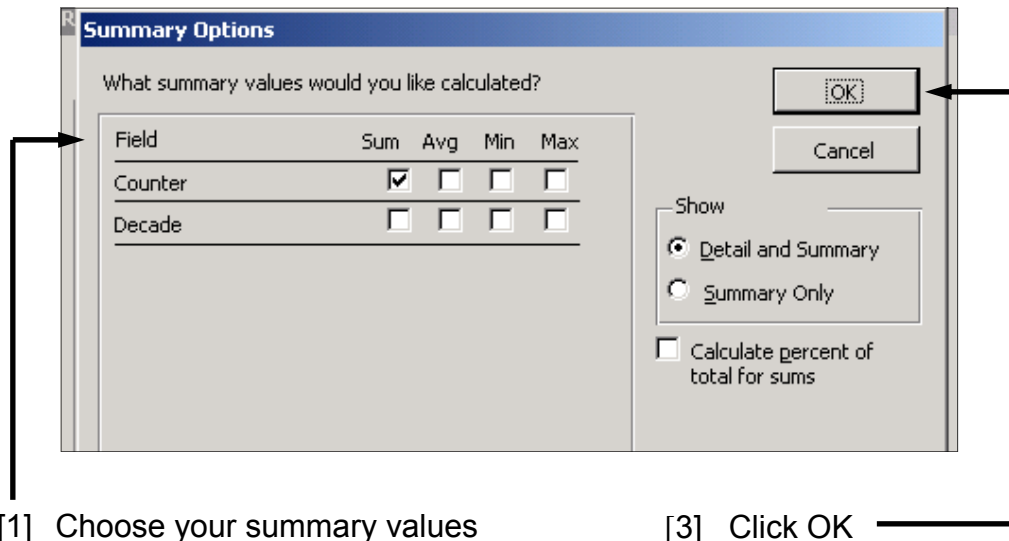
- You may choose a field on which to group your data. In the following example, famous Texans will be grouped by gender.



[1] Choose the grouping level

[2] Click Next

- When you reach the dialog box relating to **summary options** choose the fields that you would like to be calculated.



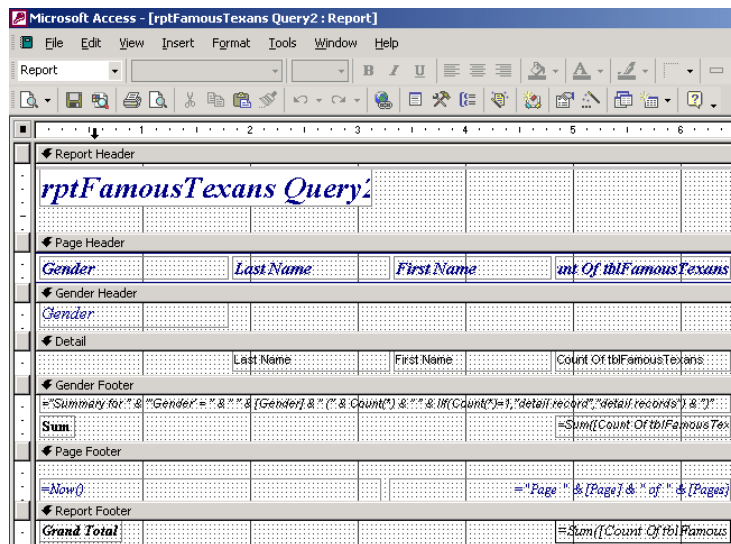
[1] Choose your summary values

[3] Click OK

[2] Include the counter field and choose Detail and Summary.

## Modifying a report

- To modify a report, open the report and go to Design View



- Edit the field designs by dragging and dropping, stretching, or deleting. Immediately switch to the report view to see how it looks.
- Repeat the procedure until the report looks good. Also, consider whether you should print the report in landscape orientation.

FamousTexans			
Gender	Last Name	First Name	Count Of FamousTexans
female	Bush	Barbara	1
	Bush	Laura	1
	Jordan	Barbara	1
	Tennayucca	Emma	1
	Sum		4
male	Murphey	Audie	1
	Bowie	James	1
	Bush	George	1
	Crockett	Davy	1
	Smith	Deaf	1
	Sum		5
Grand Total			9

## *Backing up a database*

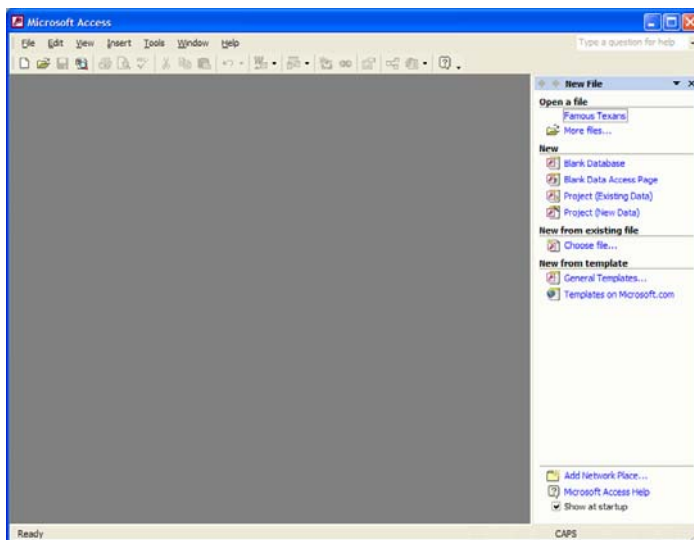
### Why should you backup your data?

- Important note: You do not use File/Save or Save As to back up the entire database. This will only backup the object (table, query, report, etc) that you are working with.
- To make a copy of your database, close the database, locate it on the hard drive, right click and copy it, then right click and paste it. A file called "Copy of Famous Texans.mdb" will be created.

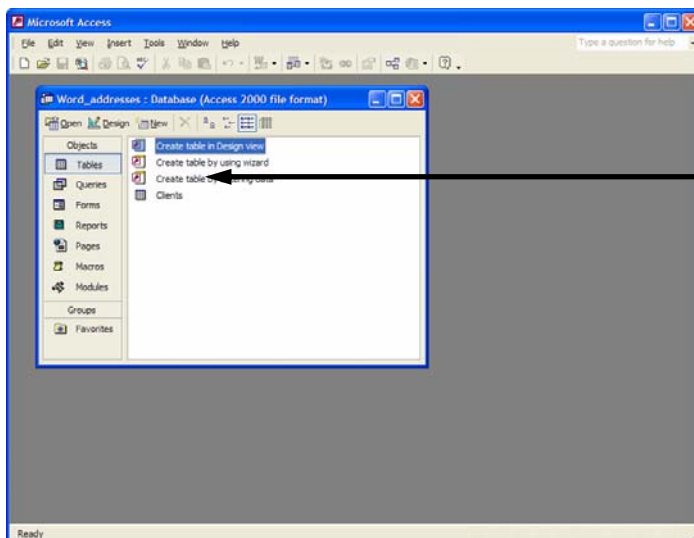
## Creating a Mail Merge

### What is a Mail Merge?

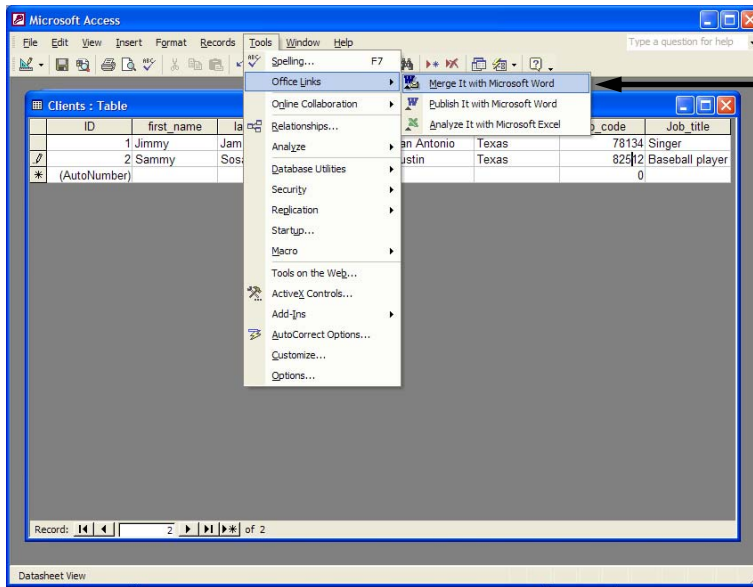
- Mail merging is the ability to create personalized letters and other publications by using data from your database.
- Data is held in fields within a database. In order to make a form letter or even an envelope, you must insert the data field into a word document.



- Once your database is open, open the table containing your data.



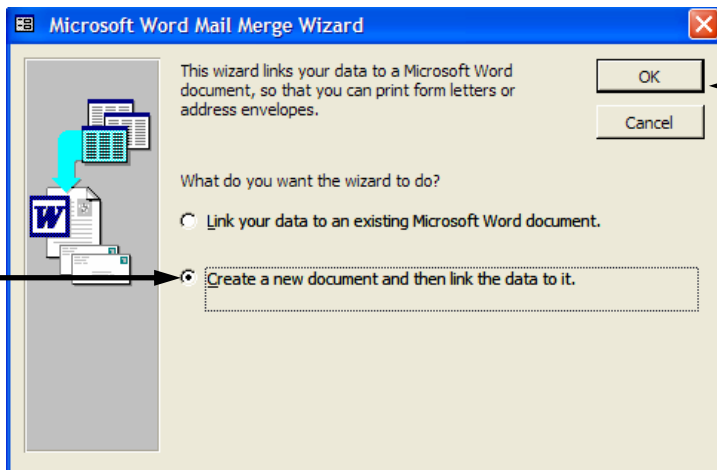
- You will now have to merge your data in the your database with an MS Word document.



[1] From the Tools menu

[2] Pick Office Links and click Merge It with MS Word.

- Once inside your Mail Merge Wizard, decided and then choose the type of MS Word document that you wish to create.

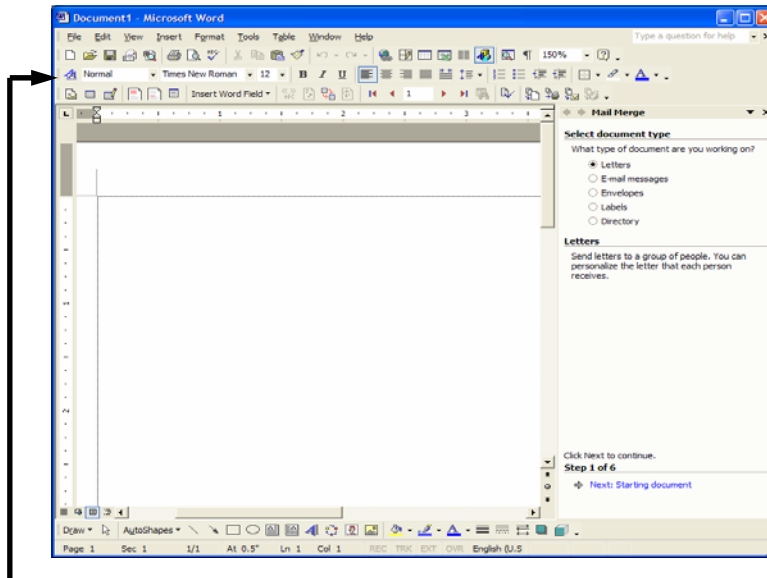


[2] Click OK

[1] Choose create a new

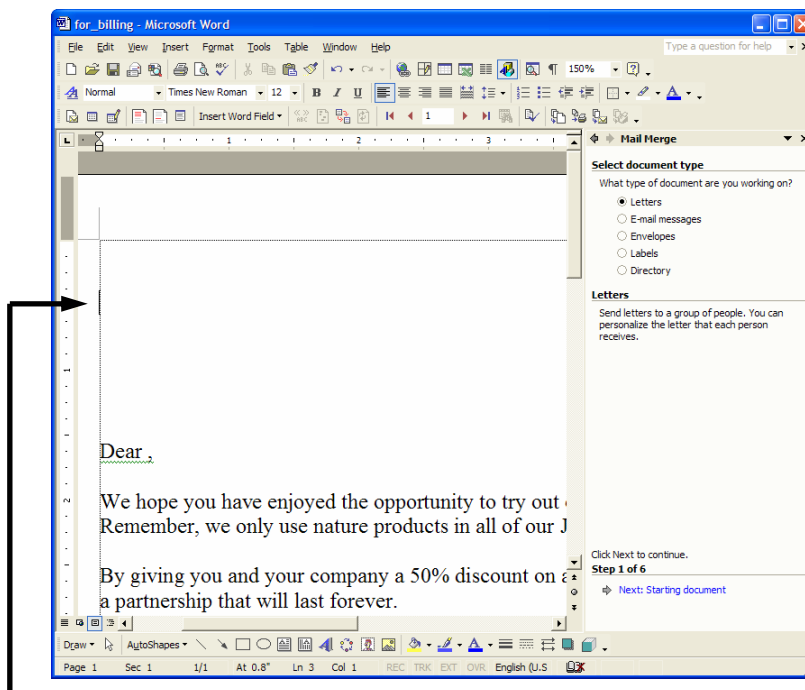


- Access will now open the MS Word program. Maximize your window and make sure you save your file prior to doing any insertions.



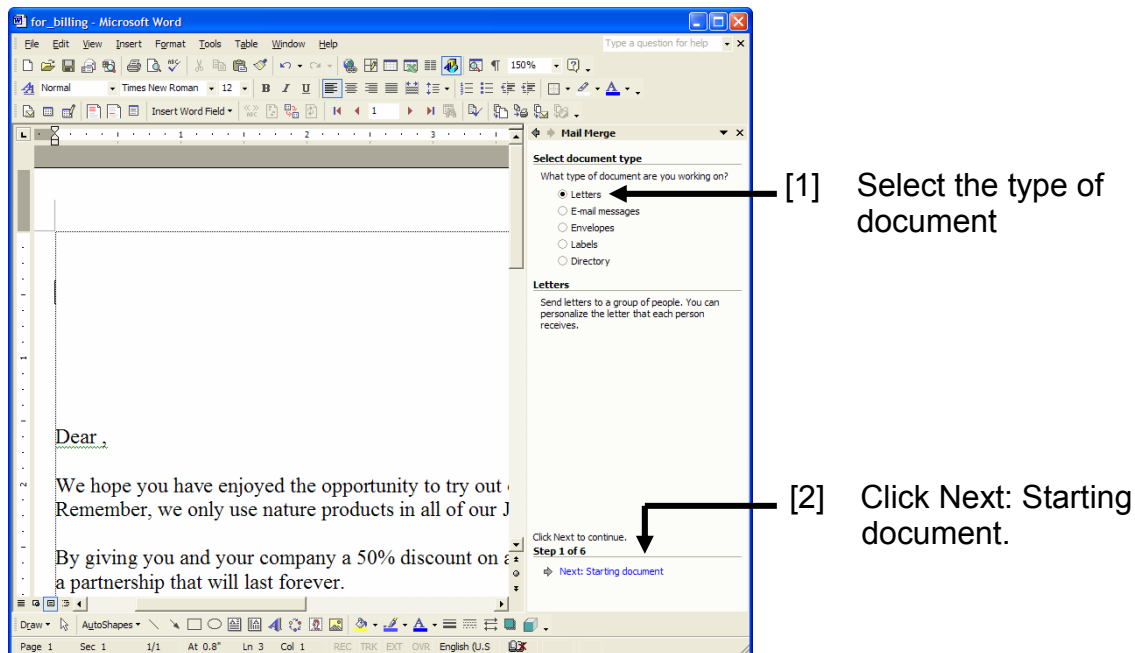
[1] Change your font style (font type, color and size)

[2] Type in the body of your letter.

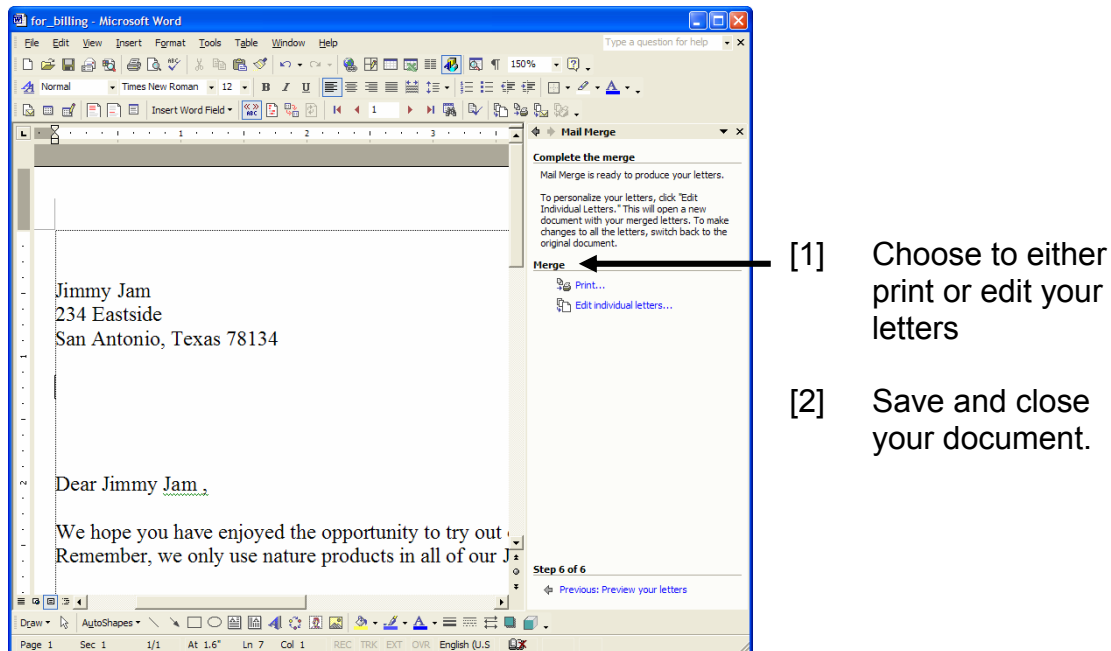


[1] Click at the top of the letter.

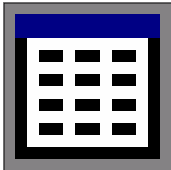
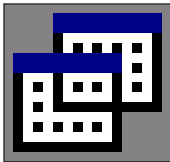
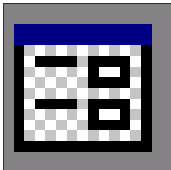
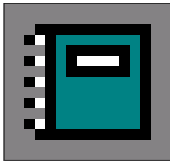
- Follow the six steps given to you in the Mail Merge panel.



- At the end of the sixth step “Preview your letters”, you should have a completed form letter.



## What types of objects can be created in MS Access?

<h3>Tables</h3> <p>A table is a collection of data about a specific topic, such as products or suppliers. Using a separate table for each topic means that you store that data only once, which makes your database more efficient, and reduces data-entry errors.</p> 	<h3>Queries</h3> <p>Queries are used to view, change, and analyze data in different ways. You can also use them as the source of records for forms, reports, and data access pages.</p> 
<h3>Forms</h3> <p>Provide different ways to view your data and allow you to change data in your database.</p> 	<h3>Reports</h3> <p>A report is an effective way to present your data in a printed format. Because you have control over the size and appearance of everything on a report</p> 

*From Microsoft Office Help (MS Access XP)*

## Some other terms to remember:

Ascending.....To sort from A to Z, 1 to 9.

Database .....A collection of information or data arranged in a logical manner (inventory, phone book, ...)

Data type .....Will determine the type of information that may be entered in that field.

Descending ...To sort from Z to A, 9 to 1.

Field.....A specific part or category of a record (first\_name, last\_name, ...)

Field name.....What is given to identify the information in a field.

Field properties... Characteristics that provide additional control over the appearance or content of that field.

Filter .....To find certain data, which will be shown on the screen. The other records will be hidden. A filter can be printed, but can not be saved.

Form styles ....Different styles that the user can choose from in order to change or enhance the appearance of their form.

Primary key ...Use to match the records in one table with the records in another table.

Record.....A collection of information based on a single item (person, place, or thing)

Sort.....To arrange data in alphabetical or numerical order

## Data Types in Access:

Text.....Any combination of text or numbers (entries up to 255 characters).

Memo .....Any combination of text and numbers (entries up to 65,535 characters).

Number.....Will accept numbers that will be used in calculations

Date/Time .....Will accept only dates and times.

Currency.....Will accept only monetary values.

AutoNumber ..Will automatically number each record.

Yes/No .....Will accept only one of two values—Yes/No, True/False, or On/Off.

OLE Object....Will accept OLE objects or objects created in another program (Word documents or Excel charts). OLE objects may also be sounds and pictures.

Hyperlink .....Will accept hyperlinks which will allow the user to jump to another document or a URL web page.

## Reasons for making a database:

- The ability to find information quickly.
- The ability to show information from a database in a attractive manner.
- The ability to create mailing list for mail merges. This allows the user a way to send out letters containing personal information kept in the database.



## *Test for Knowledge - MS Access XP*

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### Create databases based on the following topics:

#### Student Information .....Fields

Student name, Address, Home phone number, Name of parent, Parent's work number, Class schedule, and Medical information.

#### Vendor Information .....Fields

Contact person, Company or Vendors' name, Address, Business phone number, Fax number, State Bid or QISV, List of items ordered, Purchase Order or PO number, Date PO was sent and Items were received.

#### Staff Information .....Fields

Teacher's name, Address, Home phone number, Emergency contact, Medical information, Description of position held on campus, Type of certification, and Summer address.

#### P.T.A contacts .....Fields

Member's name, Address, Home phone number, Position held in organization, Position held in community, Skill level in communication/technology/Public Relations, and Years in organization.

#### Inventory of Technology...Fields

Type of computer, Version of operating system, Specifics on memory, CPU speed, Size of hard drive, and RAM, location on campus, Teacher's name, Programs with licenses install on the system.

## Mini Access Quiz

1. Name three ways that you can increase the productivity in your class-room by using a database. \_\_\_\_\_

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2. Name three ways that you can increase the productivity in your school by using a database. \_\_\_\_\_

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3. What is the difference between a record and field? \_\_\_\_\_

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4. What are the steps to creating a report in MS Access XP? \_\_\_\_\_

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5. Name some of the Data Types that are used in the creation of items in a table. \_\_\_\_\_

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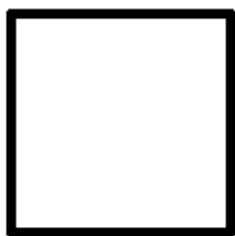
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6. Why is it important to create a primary key in a database? \_\_\_\_\_

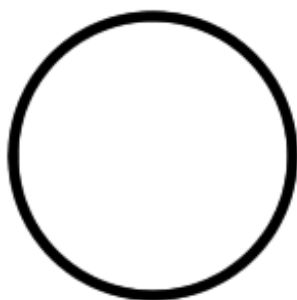
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***Geometric Reflection and Evaluation***



Something I learned  
that SQUARED with  
my beliefs.



A question going  
AROUND in my mind...



STOP!  
How do I plan to  
implement what I have  
learned?





### The Session Facilitator:

©SAISD/Office of Instructional Technology Services  
<http://itls.saisd.net/tli>

## Database Integration

Databases are primarily tool-related applications. Collecting, sorting, and reporting large amounts of data ought to be done in the context of content area instruction. Just as there are a myriad of content topics, so too the integrative use of databases is practically limitless. Below are just a few suggestions for content area integration:

<b>Elementary</b>	
Language Arts	Words I know (definitions); Parts of Speech;
Reading	My Favorite Books
Math	Word Problems; Concepts
Science	Animal Families; Properties of Matter
Social Studies	Famous People; Famous Events; Country Information; State Information
<b>Secondary</b>	
Language Arts	Vocabulary Expansion; Grammar Terms and Rules
Science	Elements; Astronomical Study
Texas History/US History/ World History	Biographical Database; Historic Events; Regional/ National Comparison;
Literature	Books by Author, Genre, etc; Synopsis Database; Books To Read (Read/Need to Read)

In these examples, the teacher should pre-plan, focusing on what information the student is likely to need and use. It would be useful for an elementary student to be able to pull up lists of words he knew, could spell, etc. or words he would need to study. It would also be valuable to be able to sort and list characteristics of different animals, in order to do a comparison/contrast writing sample.

Similarly, on the secondary level, the database serves as source material for writing reports, comparing literary styles and authors, as well as providing resources for review of concepts learned and “helper” information (“What was a gerund, again?”)

## Technology Applications: Texas Essential Knowledge and Skills

### §126.12 Technology Applications (Computer Literacy), Grades 6-8

- TEKS (7) **Solving problems.** The student uses appropriate computer based productivity tools to create and modify solutions to problems. The student is expected to:
- (C) plan, create, and edit databases by defining fields, entering data, and designing layouts appropriate for reporting;
- TEKS (8) **Solving problems.** The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:
- (E) integrate acquired technology applications skills, strategies, and use of the word processor, database, spreadsheet, telecommunications, draw, paint, and utility programs into the foundation and enrichment curricula.
- TEKS (10) **Communication.** The student formats digital information for appropriate and effective communication. The student is expected to:
- (B) demonstrate the use of a variety of layouts in a database to communicate information appropriately including horizontal and vertical layouts;
- TEKS (12) **Communication.** The student uses technology applications to facilitate evaluation of communication, both process and product. The student is expected to:
- (A) design and implement procedures to track trends, set timelines, and review and evaluate the product using technology tools such as database managers, daily/monthly planners, and project management tools;

**§126.21. Implementation of Texas Essential Knowledge and Skills for Technology Applications, High School.**

**§126.22. Computer Science I (One Credit).**

**TEKS (3) Foundations.**

The student complies with the laws and examines the issues regarding the use of technology in society. The student is expected to:

- (C) investigate measures, such as passwords or virus detection/prevention, to protect computer systems and databases from unauthorized use and tampering;

**§126.23. Computer Science II (One Credit).**

**TEKS (3) Foundations.**

The student complies with the laws and examines the issues regarding the use of technology in society. The student is expected to:

- (C) investigate measures, such as passwords or virus detection/prevention, to protect computer systems and databases from unauthorized use and tampering;

**§126.24. Desktop Publishing (One Credit).**

**TEKS (4) Information acquisition.**

The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:

- (A) use strategies to obtain print and digital information from a variety of electronic resources including, but not limited to, reference software, databases, and libraries of images, citing the source;

**§126.25. Digital Graphics/Animation (One Credit).**

**TEKS (4) Information acquisition.**

The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:

- (B) obtain print and digital information from a variety of resources including, but not limited to, encyclopedias, databases, and libraries of images.

**TEKS (7) Solving problems.**

The student uses appropriate computerbased productivity tools to create and modify solutions to problems. The student is expected to:

- (B) integrate the productivity tools including, but not limited to, word processor, database, spreadsheet, telecommunications, draw, paint, and utility programs into the digital graphics;

**§126.26. Multimedia (One Credit).**  
**TEKS (7) Solving problems.**

The student uses appropriate computerbased productivity tools to create and modify solutions to problems. The student is expected to:

- (B) select and integrate computerbased productivity tools, including, but not limited to, word processor, database, spreadsheet, telecommunications, draw, paint, and utility programs to develop and modify solutions to problems and to create new knowledge for multimedia products;

**§126.27. Video Technology (One Credit).**  
**TEKS (7) Solving problems.**

The student uses appropriate computerbased productivity tools to create and modify solutions to problems. The student is expected to:

- (B) integrate productivity tools including, but not limited to, video editor, sound editor, word processor, database, spreadsheet, telecommunications, draw, paint, and utility programs to develop and modify solutions to problems for video productions;

**§126.28. Web Mastering (One Credit).**  
**TEKS (7) Solving problems.**

The student uses appropriate computerbased productivity tools to create and modify solutions to problems. The student is expected to:

- (B) select and integrate appropriate productivity tools including, but not limited to, word processor, database, spreadsheet, telecommunication, draw, paint, and utility programs into the creation of WWW documents;

**§126.29. Independent Study in Technology Applications (One Credit).**  
**TEKS (7) Solving problems.**

The student uses appropriate computerbased productivity tools to create and modify solutions to problems. The student is expected to:

- (C) select and integrate appropriate productivity tools including, but not limited to, word processor, database, spreadsheet, telecommunication, draw, paint, and utility programs into the creation of products;

**TEKS (12) Communication.**

The student uses technology applications to facilitate evaluation of communication, both process and product. The student is expected to:

- (A) design and implement procedures to track trends, set timelines, and review and evaluate the product using technology tools such as database managers, daily/ monthly planners, and project management tools;

# 

Level	Category	Description
0	Nonuse	A perceived lack of access to technology-based tools or a lack of time to pursue electronic technology implementation. Existing technology is predominately text-based (e.g., ditto sheets, chalkboard, overhead projector).
1	Awareness	The use of computers is generally one step removed from the classroom teacher (e.g., it occurs in integrated learning system labs (i.e. Jostens, CCC, IDEAL, Plato), special computer-based pull-out programs, computer literacy classes, and central word processing labs). Computer based applications have little or no relevance to the individual teacher's instructional program.
2	Exploration	Technology-based tools serve as a supplement (e.g., tutorials, educational games, simulations) to the existing instructional program. The electronic technology is employed either for extension activities or for enrichment exercises to the
3	Infusion	Technology-based tools including databases, spreadsheets, graphing packages, probes, calculators, multimedia applications, desktop publishing, and telecommunications augment selected instructional events (e.g., science kit experiments using spreadsheets or graphs to analyze results, telecommunications activities involving data sharing among schools).
4a	Integration (mechanical)	Technology-based tools are mechanically integrated, providing a rich context for students' understanding of the pertinent concepts, themes, and processes. Heavy reliance is placed on prepackaged materials and sequential charts that aid the teacher in the daily operation of the instructional curriculum. Technology (e.g., multimedia, telecommunications, databases, spreadsheets, word processing) is perceived as a tool to identify and solve authentic problems relating to an overall
4b	Integration (routine)	Teachers can readily create integrated units with little intervention from outside resources. Technology-based tools are easily and routinely integrated, providing a rich context for students' understanding of the pertinent concepts, themes, and processes. Technology (e.g., multimedia, telecommunications, databases, spreadsheets, word processing) is perceived as a tool to identify and solve authentic problems relating to an overall theme/concept.
5	Expansion	Technology access is extended beyond the classroom. Classroom teachers actively elicit technology applications and networking from business enterprises, governmental agencies (e.g., contacting NASA to establish a link to an orbiting space shuttle through the Internet), research institutions, and universities to expand student experiences directed at problem solving, issues resolution, and student activism surrounding a major theme or concept.
6	Refinement	Technology is perceived as a process, product (e.g. invention, patent, new software designed), and tool for students to use in solving authentic problems related to an identified real-world problem or issue. In this context, technology provides a seamless medium for information queries, problem-solving, and product development. Students have read access to and a complete understanding of a vast array of technology-based tools to accomplish any particular task.



# Resources, Links & Citations

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## Access Resources on the Web

<http://www.fgcu.edu/support/office2000/access/> Florida Gulf Coast Univ.

<http://cisnet.baruch.cuny.edu/holowczak/classes/2200/access/accessall.html>

<http://www.bcschools.net/staff/AccessHelp.htm>

<http://polaris.umuc.edu/~acarswel/ADMN640/AccessTutorial.html>

<http://www.cs.unc.edu/Courses/wwwp-s98/members/barman/databaseLesson/accessTutorial.html>  
Screen Shots for Access 2000

<http://help.unc.edu/?id=3035> University of North Carolina – Good, but not enough screen shots-  
Access 2002

[http://www.windowwatch.com/2003/may/access2002\\_5.html](http://www.windowwatch.com/2003/may/access2002_5.html) Fair tutorial- lots of shots, but navigation is difficult. There is valuable information here, but you must use the links at the bottom of this page to get to reports, queries, etc.

## Print Resources

There are a number of valuable books written on the topic of Access databases. Check out new and used bookstores. An example would be “Access at a Glance” by Microsoft Press. This book has many screen shots and is easily understandable.

## Listserves and Newsgroups

If you have access to Usenet Newsgroups, you might try:

- [Comp.database.ms-access](#)
- [Comp.databases.ms-access](#)

## LOTI Resources

<http://www.learning-quest.com/LoTI> , presented by the National Business Alliance